



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,371	07/07/2003	Mitchell Rose		7825

7590 12/22/2003
Mitchell Rose
2443 Claver Rd
University Heights, OH 44118

EXAMINER

SCHEUERMANN, DAVID W

ART UNIT PAPER NUMBER

2834

DATE MAILED: 12/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/614,371

Applicant(s)

ROSE, MITCHELL

Examiner

David W. Scheuermann

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-23 and 26-49 is/are pending in the application.
- 4a) Of the above claim(s) 19-21, 26-31 and 44-49 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22, 23 and 32-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 19-21, drawn to an electric machine with coils wound about a first and second parallel cores and a multi-pole elongated permanent magnet parallel with the cores, classified in class 310, subclass 156.35.
- II. Claims 22-23 and 32-43, drawn to an electric machine with a toroidal wound coil about a ring core and a multi-pole elongated permanent magnet wherein the core and the magnet being disposed one about the other, classified in class 310, subclass 179.
- III. Claims 26-31, drawn to a method of making or assembling a permanent magnet rotor, classified in class 29, subclass 598.
- IV. Claims 44-49, drawn to an electric machine having a lengthwise-elongated core wherein the core includes a stranded or powdered magnetically permeable material, classified in class 310, subclass 216.

The inventions are distinct, each from the other because:

Inventions II and I are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as a linear motor. See MPEP § 806.05(d).

Inventions IV and I are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I can be used without a core including stranded or powdered magnetically permeable material. See MPEP § 806.05(d).

Inventions II and IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention IV has separate utility such as a linear motor. See MPEP § 806.05(d).

Inventions III and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case attaching the magnet to the rotor via a rivet or screw could form the magnetic rotor.

Inventions II and III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case attaching the magnet to the rotor via a rivet or screw could form the magnetic rotor.

Inventions IV and III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case attaching the magnet to the rotor via a rivet or screw could form the magnetic rotor.

Because these inventions are distinct for the reasons given above and the first and second parallel core search required for Group I is not required for Group II AND the toroidal wound core search required for Group II is not required for Group I restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the core including stranded or powdered magnetically permeable material search required for Group IV is not required for Group II AND the toroidal wound core search required for Group II is not required for Group IV the restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the first and second parallel core search required for Group I is not required for Group IV, AND the core including stranded or powdered magnetically permeable material search required for Group IV is not required for Group I restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

During a telephone conversation with Mitchell Rose on December 10, 2003 a provisional election was made without traverse to prosecute the invention of invention II, claims 22-23 and 32-43. Affirmation of this election must be made by applicant in replying to this Office action. Claims 19-21, 26-31 and 44-49 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 112

Claims 32-38 and 40-43 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap

Art Unit: 2834

between the elements. See MPEP § 2172.01. The omitted elements are: the rotor necessary to form the electrical machine.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 22 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Hall et al., US 4731554. Hall et al. show an electrical machine in figures 1 and 3, consisting of a magnetically permeable ring-shaped core 18, having coils 24 wound thereon and a multi-pole magnet 22 mounted on rotor 20. Note that the magnet 22 is disposed around the core.

Claims 32-26, 39-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Andrews, US 4724368. Andrews shows separators 28, as described in column 3 lines 16-47, made of phenolic or other insulative material for separation of the toroidal wound coils as shown in figure 3. It is inherent that these separators support core 26 as shown in figure 2.

Claims 32-35 and 37-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Fawzy, US 4701656. Fawzy shows toroidal core 20 cut with slots to hold coils within to the outer periphery of the surface of the core. Between these slots the coil free spaces are filled with the non-slotted core portion as shown in figure 3.

As to claim 39, note magnet 22 on rotor 32.

Re claims 40-43, note support 23-b which supports the core.

Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Skybyk shows a toroidal stator machine. Eickemeyer shows spacers between the coils of a toroidal stator machine.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David W. Scheuermann whose telephone number is (703) 308-9637. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

dws
December 16, 2003


BURTON S. MULLINS
PRIMARY EXAMINER